

ABSTRACT

A process is provided for aligning and connecting at least one optical fiber to at least one optoelectronic device so as to couple light between at least one optical fiber and at least one optoelectronic device. One embodiment of this process comprises the following steps: (1) holding at least one optical element close to at least one optoelectronic device, at least one optical element having at least a first end; (2) aligning at least one optical element with at least one optoelectronic device; (3) depositing a first non-opaque material on a first end of at least one optoelectronic device; and (4) bringing the first end of at least one optical element proximate to the first end of at least one optoelectronic device in such a manner that the first non-opaque material contacts the first end of at least one optoelectronic device and the first end of at least one optical element. The optical element may be an optical fiber, and the optoelectronic device may be a vertical cavity surface emitting laser. The first non-opaque material may be a UV optical adhesive that provides an optical path and mechanical stability. In another embodiment of the alignment process, the first end of at least one optical element is brought proximate to the first end of at least one optoelectronic device in such a manner that an interstitial space exists between the first end of at least one optoelectronic device and the first end of at least one optical element.